

BEFORE THE
PUBLIC SERVICE COMMISSION OF WISCONSIN

Joint Application of Wisconsin Electric Power Company
and Wisconsin Gas LLC, for Authority To Adjust
Electric, Natural Gas and Steam Rates – Test Year 2020

Docket No. 05-UR-109

DIRECT TESTIMONY OF RICHARD STASIK

1 **I. Introduction**

2 **Q. Please state your name and business address.**

3 A. My name is Richard Stasik. My business address is 231 W. Michigan Street, Milwaukee,
4 Wisconsin 53203.

5 **Q. By whom are you employed and in what capacity?**

6 A. I am employed by WEC Business Services, serving all of the WEC Energy Group
7 utilities, including Wisconsin Electric Power Company (“Wisconsin Electric”) as the
8 Director of Regulatory Finance, Planning Systems and Strategic/Special Projects. In that
9 position, I serve as the leader of the group that oversees and performs financial analyses
10 for regulatory filings and facilitates and manages significant regulatory proceedings
11 including state jurisdictional base rate cases, new tariff filings, and other special projects.

12 **Q. Please provide your education, professional background and relevant experience.**

13 A. My education, professional background and relevant experience are shown in Ex.-
14 WEPCO-Stasik-1.

1 Q. **Have you provided testimony in a regulatory proceeding before?**

2 A. Yes. I have provided testimony to the Federal Energy Regulatory Commission (“FERC”),
3 related to the retirement of power plants owned by Wisconsin Electric and Wisconsin
4 Public Service Corporation (“WPSC”), in the following FERC dockets:

- 5 • *Wisconsin Public Serv. Corp.*, Docket No. ER19-226-000 (approving, on December 14,
6 2018, WPSC’s request to file new wholesale rates including unamortized balance of
7 retired power plants);
- 8 • *Wisconsin Public Serv. Corp.*, Docket No. AC19-49-000 (approving, on January 29,
9 2019, WPSC’s request to use Account 182.2 to account for retired power plants);
- 10 • *Wisconsin Electric Power Company*, Docket No. AC18-231-000 (approving, on
11 December 18, 2018, Wisconsin Electric’s request to use Account 182.2 to account for
12 retired power plants); and
- 13 • *Wisconsin Electric Power Company*, Docket No. ER19-103-000 (accepting, subject to
14 refund, on December 11, 2018, Wisconsin Electric’s request to file amended wholesale
15 rates).

16 I am also providing testimony in WPSC’s rate case, Docket No. 6690-UR-126.

17 **II. Purpose of testimony**

18 Q. **On whose behalf are you submitting this testimony?**

19 A. I am submitting this testimony on behalf of Wisconsin Electric.

20 Q. **What is the purpose of your testimony?**

21 A. My testimony addresses the retirement of two of Wisconsin Electric’s power plants: the
22 Pleasant Prairie Power Plant (“Pleasant Prairie”), which was retired in April of 2018, and

1 the Presque Isle Power Plant (“PIPP”), which is scheduled to be retired by the second
2 quarter of 2019.

3 The purpose of my testimony is to provide: (1) an estimate of the cost savings to
4 Wisconsin Electric’s retail customers resulting from each plant’s retirement; (2) the net
5 remaining (unamortized) book value for each plant; and (3) the accounting and
6 ratemaking treatment Wisconsin Electric is requesting for this remaining balance.

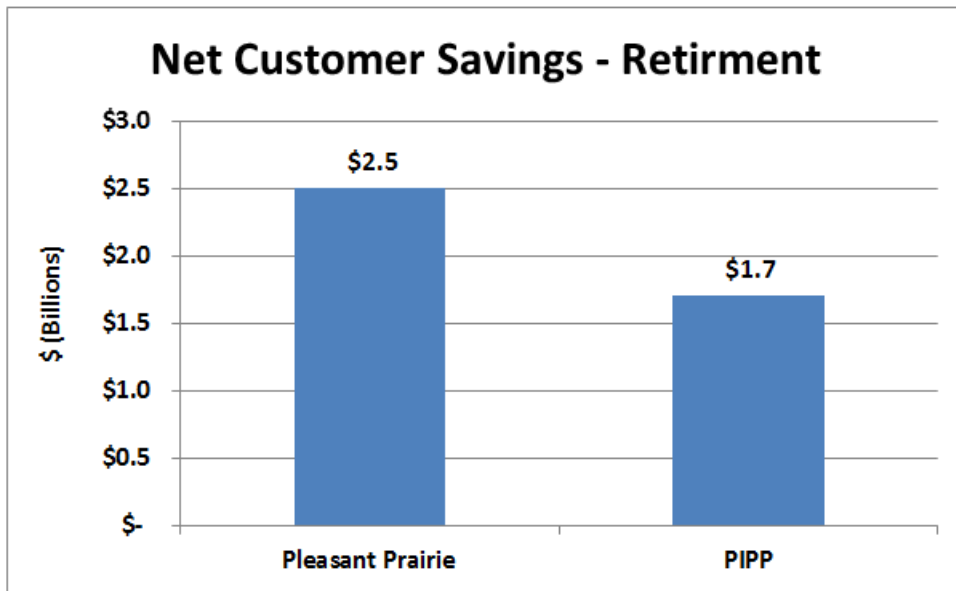
7 **Q. Please summarize your conclusions and Wisconsin Electric’s request in this docket.**

8 A. My testimony supports Wisconsin Electric’s request for approval to continue to recover
9 in retail rates the prudent investments in and a return on each plant’s unamortized rate
10 base balance that will exist as of the effective date of the rate order in this case, which I
11 assume to be January 1, 2020.

12 I conservatively estimate that Wisconsin Electric’s retail and wholesale customers will
13 realize net cost savings between \$900 million and nearly \$4.8 billion as a result of
14 Pleasant Prairie’s retirement and between \$1.1 billion and nearly \$2.5 billion as a result
15 of PIPP’s retirement. These savings are the result of avoided operations and maintenance
16 (“O&M”) expense, avoided additional capital investment in the plants, and avoided
17 return on working capital over the remaining useful lives of the plants. These savings are
18 offset by forgone energy and capacity sales as a result of retiring the plants.

19 The table and bar chart on the next page summarize the net savings associated with each
20 plant’s retirement in my base case:

(\$ billions)	Net Retirement Savings
Pleasant Prairie	\$2.5
PIPP	\$1.7
<i>Total</i>	<i>\$4.2</i>



Using base case assumptions, Wisconsin Electric expects that the effect of this request will be to lower Wisconsin Electric's retail customers' rates by over \$4 billion compared to continuing to operate Pleasant Prairie (\$2.5 billion) and PIPP (\$1.7 billion) for their respective remaining useful lives.

Q. What will the unamortized balances be for each plant on January 1, 2020?

A. As of January 1, 2020, the unamortized balance for Pleasant Prairie will be approximately \$615 million, and PIPP's unamortized plant balance will be approximately \$164 million.

1 **Q. Has Wisconsin Electric sought similar treatment of the wholesale portion of**
2 **Pleasant Prairie's and PIPP's unamortized rate base balances from the Federal**
3 **Energy Regulatory Commission ("FERC")?**

4 A. Yes. On September 27, 2018, in Docket No. AC18-231-000, Wisconsin Electric
5 requested FERC approval for its proposed accounting treatment of the wholesale portion
6 of Pleasant Prairie's unamortized rate base balance. On October 12, 2018, in Docket No.
7 ER19-103-000, Wisconsin Electric also asked FERC to allow it amend its wholesale
8 formula rate to account for the proposed adjustment in accounting treatment.

9 With respect to PIPP, Wisconsin Electric will be requesting FERC approval for its
10 proposed accounting treatment of the unamortized rate base balance and to amend its
11 wholesale formula rate to account for the proposed adjustment in accounting treatment.

12 **Q. What is the current status of the FERC proceedings related to Pleasant Prairie?**

13 A. On December 11, 2018, FERC accepted, subject to potential refund, Wisconsin Electric's
14 proposed amendments to its wholesale rates. On December 18, 2018, FERC granted
15 Wisconsin Electric's request to use Account 182.2 to record the wholesale portion of the
16 unamortized balance of Pleasant Prairie, and to amortize the balance to Account 407.
17 FERC determined Wisconsin Electric's requested accounting treatment is consistent with
18 FERC's instructions for Account 407. Wisconsin Electric's request to amend its
19 wholesale rates, Docket ER19-103-000, has not, however, concluded, and the parties to
20 that proceeding are scheduled to convene an additional settlement conference on April
21 18, 2019.

22 **Q. Are you filing exhibits with your testimony?**

23 A. Yes. I am sponsoring the following exhibits:

- 1 • Ex.-WEPCO WG-Stasik-1, as mentioned above, is a copy of my resume.
- 2 • Ex.-WEPCO WG-Stasik-2 is a summary of the estimated net cost savings that
- 3 Wisconsin Electric's customers will realize from Pleasant Prairie's retirement.
- 4 • Ex.-WEPCO WG-Stasik-3 is a summary of the cost savings from avoided O&M costs
- 5 for Pleasant Prairie.
- 6 • Ex.-WEPCO WG-Stasik-4 is a summary of the cost savings from avoided capital
- 7 expenditures at Pleasant Prairie.
- 8 • Ex.-WEPCO WG-Stasik-5 is a summary of the savings pertaining to reduced revenue
- 9 collected from Wisconsin Electric's customers for Wisconsin's Gross Receipts Tax as
- 10 it applies to the retirement of Pleasant Prairie.
- 11 • Ex.-WEPCO WG-Stasik-6 is a summary of the total Pleasant Prairie operating
- 12 benefits that will be lost with the plant's retirement. These forecast lost operating
- 13 benefits will offset the other retirement-related savings.
- 14 • Ex.-WEPCO WG-Stasik-7 is a summary of the dispatch savings (the largest
- 15 component of lost operating benefits) from 2006 through 2017 for Pleasant Prairie.
- 16 • Ex.-WEPCO WG-Stasik-8 is a graph comparing the estimated net savings from
- 17 retirement to the costs of continuing to pay a return of and on Pleasant Prairie's
- 18 remaining unamortized rate base balance.
- 19 • Ex.-WEPCO WG-Stasik-9 estimates in nominal dollars the amount of return of and
- 20 on Pleasant Prairie's rate base balance that Wisconsin Electric will collect in retail
- 21 and wholesale rates if the Commission approves the requested ratemaking treatment.
- 22 • Ex.-WEPCO WG-Stasik-10 is a summary of the estimated net cost savings that
- 23 Wisconsin Electric's customers will realize from PIPP's retirement.

- 1 • Ex.-WEPCO WG-Stasik-11 is a summary of the cost savings from avoided O&M
2 costs for PIPP.
- 3 • Ex.-WEPCO WG-Stasik-12 is a summary of the cost savings from avoided capital
4 expenditures at PIPP.
- 5 • Ex.-WEPCO WG-Stasik-13 is a summary of the savings pertaining to reduced
6 revenue collected from Wisconsin Electric's customers for Wisconsin's Gross
7 Receipts Tax as it applies to the retirement of PIPP.
- 8 • Ex.-WEPCO WG-Stasik-14 is a summary of the total PIPP operating benefits that
9 will be lost with the plant's retirement. These forecast lost operating benefits will
10 offset retirement-related savings.
- 11 • Ex.-WEPCO WG-Stasik-15 is a summary of the dispatch savings (the largest
12 component of lost operating benefits) from 2015 through 2018 for PIPP.
- 13 • Ex.-WEPCO WG-Stasik-16 is a graph comparing the estimated net savings from
14 retirement to the costs of continuing to pay a return of and on PIPP's remaining
15 unamortized rate base balance.
- 16 • Ex.-WEPCO WG-Stasik-17 estimates in nominal dollars the amount of return of and
17 on PIPP's rate base balance that Wisconsin Electric will collect in retail and
18 wholesale rates if the Commission approves the requested ratemaking treatment.

19 ***III. Wisconsin Electric's Estimation Methodology***

20 **Q. Please explain the major components of Wisconsin Electric's estimates of cost**
21 **savings due to retiring Pleasant Prairie and PIPP.**

22 A. For each of the cost savings estimates, Wisconsin Electric first estimated the O&M costs
23 that it would incur if it were required to operate and maintain Pleasant Prairie and PIPP.

1 These O&M costs will be avoided due to the plants' retirements. Next, Wisconsin
2 Electric estimated the future capital expenditures—including a return of and on those
3 future capital expenditures—that it would incur if it continued to operate Pleasant Prairie
4 and PIPP. These costs are also avoided due to the plants' retirements. Finally, Wisconsin
5 Electric estimated the impact of retirement on benefits that customers would otherwise
6 receive if Pleasant Prairie and PIPP continued to operate. These forecasted lost benefits
7 were netted against the avoided O&M and capital expenditures to produce the estimated
8 net savings to customers as a result of Pleasant Prairie and PIPP's retirements.

9 **Q. What time period did you use in developing your cost savings estimates?**

10 A. Pleasant Prairie's remaining book life as of the start of the 2020 test year will be
11 approximately 20 years for Unit 1 and common plant, and 25 years for Unit 2. Wisconsin
12 Electric has proposed to amortize the remaining rate base costs over 21 years.
13 PIPP's book life as of the start of the 2020 test year will be approximately 18 years,
14 therefore Wisconsin Electric has proposed to amortize the remaining rate base costs over
15 18 years.

16 **Q. Did Wisconsin Electric analyze multiple future scenarios when it studied the savings**
17 **that customers will see as a result of the plants' retirement?**

18 A. Yes. We analyzed "low," "base," and "high" cases for a number of variables.

19 **Q. Please describe the purpose of the "low," "base," and "high" cases.**

20 A. Wisconsin Electric developed "low," "base," and "high" cases to bookend the likely net
21 cost savings its customers will receive as a result of retiring Pleasant Prairie and PIPP. In
22 general, the base case for both Pleasant Prairie and PIPP is the estimate Wisconsin
23 Electric believes most closely represents the savings customers will receive because of

1 the retirements of Pleasant Prairie and PIPP. The high cases include more aggressive, but
2 still reasonable, assumptions about inflation and increases for the plants' O&M costs and
3 future capital expenditures. The low cases incorporate assumptions such as not escalating
4 O&M and future capital expenditures and increasing the estimated benefits of continued
5 operation. Estimated savings under all three scenarios amply support the decision to retire
6 Pleasant Prairie and PIPP.

7 **Q. Please describe the escalation factors used in the cost savings estimates.**

8 A. In general, the cost savings estimates use 0%, 2%, and 4% escalation factors to estimate
9 the increase of particular costs over time. For example, for both Pleasant Prairie and
10 PIPP, Wisconsin Electric used a 2% escalation factor for O&M costs in the base case, a
11 4% escalation factor in the high case, and did not increase O&M costs over time in the
12 low case.

13 **Q. Why did you use an escalation factor of 2% for the base case?**

14 A. Wisconsin Electric typically uses the Bureau of Labor Statistics ("BLS") inflation
15 statistics for this region as the basis for escalation factors when developing multiple year
16 forecasts. The BLS inflation factor for this region recently has been in the 2-3% range.
17 Wisconsin Electric used 2% as a conservative estimate of inflation over the projection
18 periods.

19 **Q. Why did you use an escalation factor of 4% in the high case?**

20 A. First, inflation is difficult to predict, and there is a reasonable possibility that inflation
21 over the next 20 years will be greater than the 2-3% inflation experienced in recent years.
22 Second, and more significantly, if Pleasant Prairie and PIPP were to continue to operate,
23 there is a distinct possibility that costs would increase as the plants aged. Therefore, there

1 is a reasonable possibility that the increase in costs to operate the plants over the next 20
2 years will be greater than the increase caused by inflation alone.

3 **Q. Why did you use an escalation factor of 0% for the low cases?**

4 A. We do not expect the assumptions contained in the low cases to play out. However, we
5 performed the analyses as conservative bookends to verify that even with highly
6 improbable and unfavorable assumptions, our decisions to retire Pleasant Prairie and
7 PIPP were economically-prudent.

8 **IV. *Pleasant Prairie***

9 **Q. What is Wisconsin Electric's estimate of the cost savings its customers will realize as
10 a result of Pleasant Prairie's retirement?**

11 A. Wisconsin Electric's base case estimates nearly \$2.5 billion in savings for customers
12 from Pleasant Prairie's retirement. I believe that this is a reasonable and conservative
13 estimate of the potential customers' savings and that the savings could be higher. But to
14 bookend the potential savings from Pleasant Prairie's retirement, Wisconsin Electric also
15 developed a low case and a high case, which estimate that Pleasant Prairie's retirement
16 will result in net cost savings to its customers of between \$900 million and \$4.8 billion.
17 An exhibit summarizing Wisconsin Electric's cost savings estimates is attached as Ex.-
18 WEPCO-Stasik-2.

The table below shows Wisconsin Electric's estimates of net cost-savings for customers because of Pleasant Prairie's retirement:

Pleasant Prairie Retirement Cost Savings*			
(\$ Millions)	Low Case	Base Case	High Case
Avoided O&M	\$1,029	1,650	3,675
Avoided Capital	1,035	1,250	1,413
Avoided Taxes	28	77	148
Total Savings	2,092	2,977	5,235
<i>Less: Foregone Dispatch Benefits</i>	(1,191)	(483)	(456)
Net Savings	\$901	\$2,495	\$4,779

* - Numbers may not tie due to rounding

a. Estimate of O&M savings

Q. What is Wisconsin Electric's estimate of O&M savings for customers from Pleasant Prairie's retirement?

A. Wisconsin Electric estimates that Pleasant Prairie's retirement will result in approximately \$1 billion to \$3.7 billion in O&M savings for retail and wholesale customers. Ex.-WEPCO-Stasik-3 summarizes this estimate.

Q. Please explain how Wisconsin Electric estimated the O&M costs that it would avoid by retiring Pleasant Prairie.

A. As shown in Ex.-WEPCO-Stasik-3, the O&M savings projections consist of four elements: (1) O&M (Labor and Non-Labor); (2) Rail Car Maintenance; (3) Unplanned Major Maintenance; and (4) Environmental Compliance.

O&M costs include internal and external labor; consumables (*i.e.*, tools, materials, supplies, etc.); routine and non-capital replacement parts; non-emission control chemicals, lubricants, and oil. Wisconsin Electric used \$44.5 million as a starting point for the O&M cost projections, which was the lowest full-year actual non-fuel O&M cost for Pleasant Prairie in the past five years reported in Wisconsin Electric's FERC Form 1.

1 Rail Car Maintenance costs include contractor labor and replacement parts and supplies.
2 For the Rail Car Maintenance cost projections, the starting point was \$2 million, which
3 was the average full-year actual Rail Car Maintenance expense for the past five years
4 reported in Wisconsin Electric's FERC Form 1. Again the starting point was escalated at
5 0% for the low case, 2% annually for the base case and 4% annually for the high case.

6 Unplanned Major Maintenance costs reflect anticipated projects, the precise timing of
7 which cannot be predicted, but which nevertheless are expected to occur over Pleasant
8 Prairie's remaining book life if it were to continue to operate. For these costs, Wisconsin
9 Electric assumed a \$52.5 million major maintenance activity somewhere over the 21-year
10 time period and levelized that amount over each year, resulting in estimated costs of
11 \$2.5 million per year. For simplicity and to be conservative, no escalation was applied to
12 the projection of Unplanned Major Maintenance costs in any of the estimates.

13 Environmental Compliance costs are additional estimated future costs for compliance
14 with environmental regulations. In developing these projections, Wisconsin Electric
15 assumed that, in ten years beginning in 2028, Pleasant Prairie would become subject to a
16 tax on carbon. For its base case, Wisconsin Electric assumed a \$5/ton carbon tax and
17 applied that amount to an assumed five million tons of emissions from Pleasant Prairie
18 from 2028 to 2040. This cost was spread out evenly over the last ten years of the
19 estimation period, with no escalation, for an estimate of \$25 million in costs each year. I
20 believe this estimate to be conservative, particularly because some recent carbon tax
21 proposals have been significantly higher than this figure. For the high case, we assumed a
22 \$30/ton tax for carbon. For the low case, we assumed no carbon tax or other regulation. I

1 consider this analysis to be overly conservative, but we performed it to provide a
2 bookend value on this issue.

3 **Q. What if there is no carbon tax imposed over the next twenty years?**

4 A. Imposition of a carbon tax over the next twenty years is a reasonable possibility, but by
5 no means a certainty. However, even if no carbon tax is imposed, it is still reasonable to
6 assume that there may be other environmental compliance costs for Pleasant Prairie over
7 the next 20 years. Therefore, I believe that the projected Environmental Compliance costs
8 are reasonable both because of the possibility of a future tax on carbon and because of the
9 possibility of other additional, yet currently unknown, expenditures that may be required
10 to comply with future environmental requirements.

11 **Q. What is the difference between your low, base and high case estimates of O&M cost**
12 **savings?**

13 A. We used the same escalation factors of 0%, 2% and 4% over the 20 year time period for
14 the low, base and high cases, respectively. As noted above, no escalation factor was
15 applied to Unplanned Major Maintenance or Environmental Compliance costs in any of
16 the scenarios.

17 ***b. Estimate of capital expenditure savings***

18 **Q. What is Wisconsin Electric's estimate of avoided capital expenditures from Pleasant**
19 **Prairie's retirement?**

20 A. Wisconsin Electric estimates that Pleasant Prairie's retirement will result in between \$1.0
21 billion to \$1.4 billion in capital expenditure cost savings for Wisconsin Electric's
22 customers. These estimates include return of and on capital investments that would be

1 required to continue to safely and reliably operate Pleasant Prairie from 2020 to 2040.
2 Ex.-WEPCO-Stasik-4 summarizes this estimate.

3 **Q. Please explain how Wisconsin Electric estimated the capital expenditures that are**
4 **avoided by retiring Pleasant Prairie.**

5 A. As shown in Ex.-WEPCO-Stasik-4, the capital expenditure savings projections consist of
6 three components: (1) additional capital expenditures that would be required to keep
7 Pleasant Prairie running safely and reliably over the next 21 years; (2) Wisconsin
8 Electric's load ratio share (43%) of addition transmission facilities that would be required
9 for the continued operation of Pleasant Prairie; and (3) a return on working capital. In
10 calculating return costs, Wisconsin Electric used its requested return on equity ("ROE")
11 of 10.35%.

12 **Q. Please describe the additional capital expenditures that would be required to keep**
13 **the plant operating and how Wisconsin Electric developed the estimates for those**
14 **expenditures.**

15 A. The estimated capital expenditures required to keep Pleasant Prairie operating safely and
16 reliably would include the costs of turbines, boilers, generators and emission control
17 equipment for Units 1 and 2. These costs would also include Common Plant expenses
18 such as fuel (coal) handling, ash handling and wastewater treatment, and switchyard and
19 transformation equipment.

20 Wisconsin Electric developed the capital expenditure projections by starting with its most
21 recent five-year capital expenditure forecast for Pleasant Prairie that was developed in
22 2017, before Wisconsin Electric decided to retire the plant. The 2017 five-year forecast
23 for capital expenditures at Pleasant Prairie was as follows: 2018 - \$11 million; 2019 -

1 \$18 million; 2020 - \$31 million; 2021 - \$49 million; and 2022 - \$41 million. When
2 building its model, Wisconsin Electric used these amounts for the capital expenditures for
3 2020 through 2022. For 2023, Wisconsin Electric estimated capital expenditures of
4 \$30 million, which was the average of the capital expenditures for 2018-2022 in the five-
5 year forecast, plus the corresponding escalation factor (0% for the low case, 2% for the
6 base case and 4% for the high case). For the remainder of the 20-year analysis period—
7 2024 through 2040—the \$30 million estimate for 2023 was escalated by 2% for the base
8 case and by 4% for the high case, but was not escalated in the low case.

9 **Q. Please describe the transmission costs included in the projections.**

10 A. In addition to capital expenditures for the plant itself, continued operation of Pleasant
11 Prairie would require the American Transmission Company (“ATC”) to make capital
12 investments in transmission infrastructure. Wisconsin Electric transferred its transmission
13 assets to ATC and, therefore, does not own or operate transmission facilities. But
14 Wisconsin Electric customers pay 43% of ATC’s transmission costs, including the costs
15 of constructing additional transmission facilities, through a load ratio share calculation.
16 Retiring Pleasant Prairie in April 2018 reduced congestion near the Illinois-Wisconsin
17 border and, thereby, eliminated the need for ATC to construct the “Southeastern
18 Wisconsin Northeastern Illinois Reinforcement Project,” which had been included in
19 ATC’s transmission expansion plans with an expected in-service date of approximately
20 2020. This project is commonly known as the “Southeastern Wisconsin Northeastern
21 Illinois Reinforcement Project” and that is what I will call it in this testimony. The
22 expected cost of the Southeastern Wisconsin Northeastern Illinois Reinforcement Project
23 was approximately \$60 million, with Wisconsin Electric’s 43% load ratio share being

1 approximately \$25.8 million. The total return of and on that investment that Wisconsin
2 Electric's customers would have been responsible for over the life of that asset was \$81.7
3 million. If Pleasant Prairie had remained in operation for even a few more years, that
4 project would have been needed and those costs incurred. However, because Pleasant
5 Prairie was retired when it was, that project was cancelled and those capital expenditures
6 were no longer necessary.

7 **Q. Please describe the working capital costs included in the projections.**

8 A. Wisconsin Electric also estimated the return on working capital costs (principally the cost
9 of maintaining a coal pile at the plant) over the next 20 years that would be avoided by
10 Pleasant Prairie's retirement. In determining the amount of working capital, Wisconsin
11 Electric started with its actual 2017 working capital needs specific to Pleasant Prairie of
12 \$46 million for the year 2017 and then escalated that amount by 0% in the low case, 2%
13 each year for the base case estimate, and 4% for the high case estimate. The estimated
14 working capital need for each year was multiplied by the authorized rates of return, as
15 discussed above, to arrive at the revenue requirement supporting the return on working
16 capital.

17 **Q. Did you make any other adjustments in your cost savings estimates?**

18 A. Yes. Wisconsin Electric's cost savings estimate also includes estimated payments under
19 Wisconsin's Gross Receipts Tax that will be avoided due to the retirement of Pleasant
20 Prairie. These tax savings, which are shown in Ex.-WEPCO-Stasik-5, are \$28 million in
21 the low case, \$77 million in the base case and \$148 million in the high case.

1 c. *Estimate of Lost Customer Benefits Due to Retirement*

2 **Q. Previously, you discussed cost savings that will be realized due to the retirement of**
3 **Pleasant Prairie. Are there any customer benefits that will be lost as a result of the**
4 **retirement?**

5 A. Yes. The savings I identified are offset by operating benefits that are lost as a result of
6 Pleasant Prairie's retirement. Wisconsin Electric estimates that Pleasant Prairie's
7 retirement will result in the loss to retail and wholesale customers of total operating
8 benefits of between \$439 million and \$1.1 billion over the next 20 years. Ex.-WEPCO-
9 Stasik-6 summarizes this estimate. These lost benefits include lost dispatch benefits, lost
10 revenues from short-term capacity sales and lost revenues from the sale of coal ash.

11 **Q. Please explain how you calculated lost operating benefits caused by Pleasant**
12 **Prairie's retirement.**

13 A. When Pleasant Prairie was committed and dispatched, Wisconsin Electric's customers
14 were entitled to the revenues from selling the energy generated by the plant. However,
15 the revenue generated by energy sales was offset by the variable costs of running the
16 plant ("Dispatch Costs").

17 Dispatch Costs consisted of the variable cost of fuel, rail transportation, and
18 environmental control chemicals. Pleasant Prairie was not committed and dispatched by
19 MISO unless Dispatch Costs were lower than the expected cost of alternative sources of
20 energy. Thus, when Pleasant Prairie was dispatched, it created benefits for customers
21 measured by the spread between MISO prices for the energy generated and sold into the
22 MISO market and Dispatch Costs.

1 Customers received dispatch benefits when Pleasant Prairie was dispatched to sell energy
2 into the MISO markets. The “Net Dispatch Benefits” created from these sales were
3 credited 100% to customers.

4 Because Wisconsin Electric has had generating capacity beyond its reserve requirements
5 in recent years, it was able to sell that additional capacity in the MISO Planning Resource
6 Auction. Additionally, due to Pleasant Prairie’s proximity to a part of the state that has
7 had significant development and road construction, Wisconsin Electric was also able to
8 sell some of the ash that was generated by burning coal at the plant. With Pleasant
9 Prairie’s retirement, customers will no longer be able to benefit from these revenue
10 streams.

11 **Q. Please explain how Wisconsin Electric estimated Net Dispatch Benefits for the base**
12 **case and the high case.**

13 A. In both the base case and the high case, Wisconsin Electric assumed that Wisconsin
14 Electric would achieve Net Dispatch Benefits to customers of \$15 million/year each year
15 during the 21-year study period. The \$15 million margin for the base case and the high
16 case is an estimate based on the downward trend in dispatch savings from 2006 through
17 2017 as shown in Ex.-WEPCO-Stasik-7. Given the age and the increasing amount of
18 renewable generation with significantly lower fuel costs in the MISO market, I believe
19 that it is reasonable to assume Pleasant Prairie’s Net Dispatch Benefits would have
20 continued to decline. But to be conservative, and to simplify the analysis, both the base
21 case and the high case assume Net Dispatch Benefits remained static during the next 21
22 years. Although this estimate is marginally lower than Pleasant Prairie’s recent
23 experience, it likely overestimates the benefits to customers later in the analysis.

1 **Q. What is the basis for the low case estimate for Net Dispatch Benefits?**

2 A. In the low case, Wisconsin Electric assumed that Net Dispatch Benefits would increase
3 by 4% annually starting from Pleasant Prairie's 2017 adjusted margin. *See* Ex.-WEPCO-
4 Stasik-7, column E. For test year 2020, the analysis uses an estimated foregone Net
5 Dispatch Benefit of \$22.5 million, which increases to \$60.8 million in 2040.

6 It should also be noted that because the foregone operating benefits *reduce* net savings to
7 customers in this analysis, and because Wisconsin Electric is attempting to bookend the
8 range of net savings, the low case uses *higher* estimates of Net Dispatch Benefits than
9 Wisconsin Electric believes are likely to occur.

10 **Q. How did Wisconsin Electric forecast energy prices and the number of hours that**
11 **Pleasant Prairie would be dispatched in each of the next 21 years?**

12 A. Wisconsin Electric did not attempt to specifically estimate the MISO energy prices and
13 volumes each year. As stated above, Wisconsin Electric estimated total dispatch savings
14 each year based on the trend over the past ten years, which showed a decline in dispatch
15 savings from \$154 million in 2006 to \$20 million in 2017 and the reasonable expectation
16 that this trend will continue in the future. *See* Ex.-WEPCO-Stasik-7.

17 **Q. Why did Pleasant Prairie's Net Dispatch Benefits trend downward?**

18 A. The recent history of increasing Pleasant Prairie Dispatch Costs combined with
19 decreasing MISO energy market prices resulted in a steady decline in the number of
20 hours each year when Pleasant Prairie was dispatched. Those trends also resulted in lower
21 Pleasant Prairie margins in the hours in which the plant was dispatched.

1 **Q. Please summarize the foregone Net Dispatch Benefits for each case.**

2 A. Wisconsin Electric's analysis uses a \$782 million estimate of foregone Net Dispatch
3 Benefits in the low case, and a \$315 million estimate of foregone Net Dispatch Benefits
4 in the base case and the high case. It is important to keep in mind that Wisconsin
5 Electric's analysis attempts to bookend the possible cost savings of the retirement of
6 Pleasant Prairie. Therefore, Wisconsin Electric used *high* estimates of lost operating
7 benefits in the *low* case, and *low* estimates of lost operating benefits in the *high* case.

8 **Q. Are there other sources of customer benefits that will be lost with Pleasant Prairie's**
9 **retirement?**

10 A. Yes. Occasionally, Wisconsin Electric made short-term capacity sales from Pleasant
11 Prairie when the capacity was not needed by customers, and the revenues were credited
12 100% to customers. In addition, Wisconsin Electric sold the coal ash created by Pleasant
13 Prairie, and the revenues from such sales also were 100% credited to customers.

14 **Q. Please explain how Wisconsin Electric estimated the lost short term capacity sales**
15 **revenues.**

16 A. In developing the estimated lost short-term capacity sales revenues, Wisconsin Electric
17 started with the actual short-term capacity sales in 2017 and set the capacity rate at 10%
18 of the Cost of New Entry ("CONE"). Wisconsin Electric historically has sold its residual
19 generating capacity through the MISO Zone 2 Planning Resource Auction. Although the
20 annual clearing price for the MISO Zone 2 Planning Resource Auction has experienced
21 some volatility, on average over that period of time, it has been about 10% of CONE,
22 which is why we used that value. Wisconsin Electric assumed that short term capacity
23 sales would be made through 2029 and that there would be no sales of excess capacity

1 from 2030 to the end of the period. The capacity sales revenues were escalated by 2%
2 through 2029 for the base case and were not escalated for the high case. For the low case,
3 the analysis assumes capacity sales revenue escalates at 4% and Wisconsin Electric is
4 able to continue to make short-term capacity sales through 2040. Wisconsin Electric
5 estimates that, over this period, Pleasant Prairie's retirement will result in the loss of \$337
6 million in short-term capacity sales in the low case, \$113 million in the base case and \$99
7 million in the high case.

8 **Q. Please explain how Wisconsin Electric estimated the lost ash sales revenues.**

9 A. Wisconsin Electric started with \$2 million in ash sales revenues, which was the average
10 of annual ash sales revenues for previous years. This amount was not escalated in the
11 high case, by 2% in the base case and by 4% in the low case. Over the next 21 years,
12 Wisconsin Electric estimates \$72 million in lost ash sales in the low case, \$55 million in
13 the base case and \$42 million in the high case.

14 **Q. What are the total net operating benefits that will be lost as a result of Pleasant**
15 **Prairie's retirement?**

16 A. As shown in Ex.-WEPCO-Stasik-6, when lost dispatch benefits, short-term capacity
17 sales, and coal ash sales are combined, the net lost operating benefits are \$1.2 billion in
18 the low case, \$464 million in the base case and \$456 million in the high case.

19 **Q. How were costs relating to a return of and on Pleasant Prairie's remaining**
20 **unamortized rate base balance treated in these cost estimates?**

21 A. As I explained above, Wisconsin Electric's investment in Pleasant Prairie is currently in
22 rate base, and the company is requesting authorization to continue recovering a return of
23 and on Pleasant Prairie's unamortized balance from retail and wholesale customers for its

1 remaining economic life. If Wisconsin Electric receives the requested regulatory
2 approvals for this rate treatment, Wisconsin Electric's retail and wholesale customers will
3 continue to pay a return of and on Pleasant Prairie's remaining rate base just like they
4 currently are and would do if Pleasant Prairie continued to operate until the end of its
5 remaining book life. Therefore, because these costs will be the same regardless of
6 Pleasant Prairie's retirement, they are not considered in estimating the overall cost
7 savings from Pleasant Prairie's retirement.

8 **Q. Are the estimated cost savings from Pleasant Prairie's retirement greater than the**
9 **expected costs of a return of and on Pleasant Prairie's remaining unamortized rate**
10 **base balance?**

11 A. Yes. As shown in Ex.-WEPCO-Stasik-2, the estimated net cost savings from retiring
12 Pleasant Prairie is \$2.5 billion for the base case. As shown in Ex.-WEPCO-Stasik-9, the
13 expected cost of a return of and on Pleasant Prairie's remaining unamortized rate base for
14 retail and wholesale customers is approximately \$1.2 billion. A comparison from 2020
15 through 2040 of the cost savings from retiring Pleasant Prairie and the costs attributable
16 to a return of and on Pleasant Prairie's remaining rate base balance is shown in the graph
17 attached as Ex.-WEPCO-Stasik-8.

V. *Presque Isle Power Plant (PIPP)*

Q. What is Wisconsin Electric's estimate of the cost savings its customers will realize as a result of PIPP's retirement?

A. Wisconsin Electric's base case estimates nearly \$1.7 billion in savings for customers from PIPP's retirement. I believe that this is a reasonable and conservative estimate of the potential customers' savings and that the savings could be higher. Like its analysis of Pleasant Prairie, Wisconsin Electric also developed a low and high case to bookend the cost-savings for PIPP's retirement. The low case estimate for PIPP is over \$1.1 billion in cost-savings, and the high case is nearly \$2.5 billion. An exhibit summarizing Wisconsin Electric's cost savings estimates is attached as Ex.-WEPCO-Stasik-10.

The table below shows Wisconsin Electric's estimates of net cost-savings for customers because of PIPP's retirement:

PIPP Retirement Cost Savings*			
(\$ Millions)	Low Case	Base Case	High Case
Avoided O&M	\$738	1,027	1,650
Avoided Capital	570	651	741
Avoided Taxes	35	52	76
Total Savings	1,344	1,730	2,467
Less: Foregone Dispatch Benefits	(201)	(59)	(1)
Net Savings	\$1,143	\$1,671	\$2,466

* - Totals may not tie due to rounding

1 a. *Estimate of O&M savings*

2 **Q. What is Wisconsin Electric's estimate of O&M savings for customers from PIPP's**
3 **retirement?**

4 A. Wisconsin Electric estimates that PIPP's retirement will result in approximately \$738
5 million to \$1.7 billion in O&M savings for customers. Ex.-WEPCO-Stasik-11
6 summarizes this estimate.

7 **Q. Please explain how Wisconsin Electric estimated the O&M costs that it would avoid**
8 **by retiring PIPP.**

9 A. Like Pleasant Prairie, Wisconsin Electric's O&M savings projections consist of four
10 elements: (1) O&M (Labor and Non-Labor); (2) Rail Car Maintenance; (3) Unplanned
11 Major Maintenance; and (4) Environmental Compliance. The same costs were included
12 in each of these categories as for Pleasant Prairie.

13 Wisconsin Electric used \$38.1 million as a starting point for the O&M cost projections,
14 which was the most recent full-year (2016) actual non-fuel O&M cost for PIPP before the
15 decision was made to retire the plant as reported in Wisconsin Electric's FERC Form 1.
16 This O&M cost was escalated at 0% for the low case, 2% annually for the base case and
17 4% annually for the high case.

18 For the Rail Car Maintenance cost projections, the starting point was \$400,000, which
19 was the full-year actual Rail Car Maintenance expense for 2016, as reported in Wisconsin
20 Electric's FERC Form 1. Again the starting point was escalated at 0% for the low case,
21 2% annually for the base case and 4% annually for the high case.

22 For Unplanned Major Maintenance costs, Wisconsin Electric assumed a \$45 million
23 major maintenance activity somewhere over the 18-year time period and levelized that

1 amount over each year, resulting in estimated costs of \$2.5 million per year. For
2 simplicity and to be conservative, no escalation was applied to the projection of
3 Unplanned Major Maintenance costs in any of the estimates.

4 For Environmental Compliance costs, Wisconsin Electric used the same projections for
5 the cost of a carbon tax or other environmental regulations as it did for Pleasant Prairie.
6 For its base case, Wisconsin Electric assumed a \$5/ton carbon tax and applied that
7 amount to an assumed two million tons of emissions from PIPP from 2029 to 2037. This
8 cost was spread out evenly over the last ten years of the estimation period, with no
9 escalation, for an estimate of \$10 million in costs each year. I believe this estimate to be
10 conservative, particularly because some recent carbon tax proposals have been
11 significantly higher than this figure. For the high case, we assumed a \$30/ton tax for
12 carbon. For the low case, we assumed no carbon tax or other regulation.

13 ***b. Estimate of capital expenditure savings***

14 **Q. What is Wisconsin Electric's estimate of avoided capital expenditures from PIPP's**
15 **retirement?**

16 **A.** Wisconsin Electric estimates that PIPP's retirement will result in between \$570 million to
17 \$740 million in capital expenditure cost savings for Wisconsin Electric's customers.
18 These estimates include return of and on capital investments that would be required to
19 continue to safely and reliably operate PIPP from 2020 to 2037. Ex.-WEPCO-Stasik-4
20 summarizes this estimate.

1 **Q. Please explain how Wisconsin Electric estimated the capital expenditures that are**
2 **avoided by retiring PIPP.**

3 A. As shown in Ex.-WEPCO-Stasik-12, the capital expenditure savings projections for PIPP
4 consist of two components: (1) additional capital expenditures that would be required to
5 keep PIPP running safely and reliably over the next 18 years; and (2) a return on working
6 capital. In calculating return costs, Wisconsin Electric used the company's requested
7 return on equity ("ROE") of 10.35%.

8 **Q. Please describe the additional capital expenditures that would be required to keep**
9 **the plant operating and how Wisconsin Electric developed the estimates for those**
10 **expenditures.**

11 A. The estimated capital expenditures required to keep PIPP operating safely and reliably
12 would include the costs of turbines, boilers, generators and emission control equipment.
13 These costs would also include Common Plant expenses such as fuel (coal) handling, ash
14 handling and waste water treatment, and switchyard and transformation equipment.
15 Wisconsin Electric developed the capital expenditure projections by starting with its
16 forecast capital expenditures of \$19.4 million for 2019 plus a foregone ash handling
17 project that would have required an additional \$15 million investment in 2019. To
18 estimate future capital investments at PIPP for 2020 and beyond, the \$19.4 million
19 forecast for 2019 was escalated by 0% in the low case, 2% in the base case, and 4% for
20 the high case estimate. Beginning in 2034 for all of the cases, Wisconsin Electric
21 assumed its capital expenditures would decline by 20% annually as PIPP would have
22 otherwise neared retirement at the end of its book life in 2037.

1 **Q. Please describe the working capital costs included in the projections.**

2 A. Wisconsin Electric also estimated the return on working capital costs over the next 18
3 years that would be avoided by PIPP's retirement. In determining the amount of working
4 capital, Wisconsin Electric started with its actual 2018 year end balances for materials
5 and supplies as well as coal inventory specific to PIPP of \$16.1 million and then
6 escalated that amount by 0% in the low case, 2% each year for the base case estimate,
7 and 4% for the high case estimate. The estimated working capital need for each year was
8 multiplied by the authorized rates of return, as discussed above, to arrive at the revenue
9 requirement supporting the return on working capital.

10 **Q. Did you make any other adjustments in your cost savings estimates?**

11 A. Yes. Wisconsin Electric's cost savings estimate also includes estimated payments under
12 Wisconsin's Gross Receipts Tax that will be avoided due to the retirement of PIPP. These
13 tax savings, which are shown in Ex.-WEPCO-Stasik-13, are \$35.3 million in the low
14 case, \$51.7 million in the base case and \$76.2 million in the high case.

15 *c. Estimate of Lost Customer Benefits Due to Retirement*

16 **Q. Previously, you discussed cost savings that will be realized due to the retirement of**
17 **PIPP. Are there any customer benefits that will be lost as a result of the retirement?**

18 A. Yes. The savings I identified are offset by operating benefits that have been lost as a
19 result of the PIPP retirement. Wisconsin Electric estimates that PIPP's retirement will
20 result in customers foregoing total operating benefits of between \$1.4 million and \$200
21 million over the next 18 years. The base case estimate Wisconsin Electric used is \$59
22 million. Ex.-WEPCO-Stasik-14 summarizes these estimates. Unlike Pleasant Prairie,

1 these estimates only include foregone Net Dispatch Benefits, which I described earlier in
2 my testimony.

3 **Q. How were costs relating to a return of and on PIPP's remaining unamortized rate**
4 **base balance treated in these cost estimates?**

5 A. As I explained above, Wisconsin Electric's investment in PIPP is currently in rate base,
6 and the company is requesting authorization to continue recovering a return of and on
7 PIPP's unamortized balance from retail and wholesale customers for its remaining
8 economic life. If Wisconsin Electric receives the requested regulatory approvals for this
9 rate treatment, Wisconsin Electric will continue to recover in its retail rates a return of
10 and on PIPP's remaining rate base just like they currently are and would do if PIPP
11 continued to operate until the end of its remaining book life. Therefore, because these
12 costs will be the same regardless of PIPP's retirement, they are not considered in
13 estimating the overall cost savings from PIPP's retirement.

14 **Q. Are the estimated cost savings from PIPP's retirement greater than the expected**
15 **costs of a return of and on PIPP's remaining unamortized rate base balance?**

16 A. Yes. As shown in Ex.-WEPCO-Stasik-10, the estimated net cost savings from retiring
17 PIPP is \$1.7 billion for the base case. As shown in Ex.-WEPCO-Stasik-15, the expected
18 cost of a return of and on PIPP's remaining unamortized rate base for retail and
19 wholesale customers is approximately \$200 million. A comparison from 2020 through
20 2037 of the cost savings from retiring PIPP and the costs attributable to a return of and on
21 PIPP's remaining rate base balance is shown in the graph attached as Ex.-WEPCO-
22 Stasik-16.

1 **VI. *Proposed accounting and ratemaking treatment for Pleasant Prairie’s and PIPP’s***
2 ***remaining unamortized balances.***

3 **Q. What is Pleasant Prairie’s unamortized plant balance?**

4 A. As of January 1, 2020, the unamortized balance will be approximately \$615 million.

5 **Q. What is PIPP’s unamortized plant balance?**

6 A. PIPP’s unamortized plant balance will be approximately \$164 million as of January 1,
7 2020.

8 **Q. What accounting treatment is Wisconsin Electric requesting for Pleasant Prairie’s**
9 **and PIPP’s unamortized balances?**

10 A. Wisconsin Electric is requesting Commission approval to transfer the plants’ unamortized
11 rate base balance to Account 182.2 (“Unrecovered plant and regulatory study costs”) of
12 the Commission’s Uniform System of Accounts (“USOA”) and to amortize the amounts
13 in Account 182.2 to Account 407 (“Amortization of property losses, unrecovered plant
14 and regulatory study costs”) over the plants’ remaining book life, with carrying cost set at
15 the company’s prevailing authorized weighted average cost of capital. From customers’
16 perspective, there will be no change—the unamortized balance will remain in rates and
17 be collected over the same period as it would have been if the plants had remained in
18 service.

19 **Q. Over what amortization period is Wisconsin Electric requesting to recover Pleasant**
20 **Prairie’s and PIPP’s unamortized balances?**

21 A. The company is proposing to simply continue the same rate of amortization as was in
22 effect while the plants were in operation. As such, Wisconsin Electric is proposing an
23 amortization period of 21 years for Pleasant Prairie, and an amortization period of 18

1 years for PIPP. These amortization periods are based on the depreciation study filed by
2 Wisconsin Electric in Docket 5-DU-102, which became effective January 1, 2015, as
3 updated to reflect appropriate adjustments since 2015 such as additional accumulated
4 depreciation, capital additions and retirements. Again, this will result in no change from
5 customers' perspectives.

6 **Q. Is Wisconsin Electric proposing any adjustments to Account 182.2 to reflect removal**
7 **costs for Pleasant Prairie and PIPP?**

8 A. Yes. Wisconsin Electric collected a retirement reserve of approximately \$109 million that
9 was used to reduce Pleasant Prairie's remaining unamortized rate base balance, resulting
10 in the remaining book value of approximately \$615 million noted above. Wisconsin
11 Electric estimates that the removal costs for Pleasant Prairie will be \$42 million.
12 Wisconsin Electric seeks permission to include the estimated removal costs in the balance
13 transferred to Account 182.2 for a total amount of approximately \$657 million in
14 Account 182.2.

15 For PIPP, Wisconsin Electric collected a retirement reserve of approximately \$ 12
16 million that was used to reduce PIPP's remaining unamortized rate base balance,
17 resulting in the remaining book value of approximately \$164 million. Wisconsin Electric
18 estimates that the removal costs for PIPP will be \$35 million. Wisconsin Electric seeks
19 permission to include the estimated removal costs in the balance transferred to Account
20 182.2 for a total amount of approximately \$200 million in Account 182.2.

21 The actual removal costs for PIPP and Pleasant Prairie may be higher or lower than these
22 estimates. Wisconsin Electric will recover only its actual removal costs.

1 **VII. Conclusion**

2 **Q. Please summarize your testimony.**

3 A. My testimony presents reasonable estimates of the net cost-savings Wisconsin Electric's
4 customers should expect from the retirement of Pleasant Prairie and PIPP, as well as low
5 and high bookends for these savings. Wisconsin Electric estimates its customers will save
6 over \$4 billion from these retirements. Even under pessimistic assumptions, customers
7 will likely save over \$2 billion because of these retirements, and my analysis shows it is
8 possible customers could save over \$7 billion. In all cases, Wisconsin Electric's analysis
9 shows it was economically prudent to retire Pleasant Prairie and PIPP and it is just and
10 reasonable for Wisconsin Electric to receive recovery of its prudent investments and a
11 return on those investments.

12 **Q. Does this complete your direct testimony?**

13 A. Yes.